

WHAT IS CLAIMED IS

1. A method for copying a plural-page document with an image forming apparatus, the image forming apparatus including a scanner for scanning each page of the document and a fixing unit for fixing images of each page of the document to a respective sheet, comprising:

scanning each page of the document with the scanner;

determining whether the scanner is scanning any page of the document;

setting a copy rate for copying the document to a first level if the scanner is scanning any page of the document, the copy rate corresponding to a number of pages copied in a set period of time; and

setting the copy rate to a second level higher than the first level if the scanner is not scanning any pages of the document.

2. A method according to claim 1, further comprising:

supplying a first amount of power to the fixing unit if the scanner is scanning any page of the document; and

supplying a second amount of power, higher than the first amount of power, to the fixing unit if the scanner is not scanning any pages of the document.

3. A method according to claim 2, further comprising:

detecting a fixing temperature of the fixing unit, the fixing temperature being a temperature at which the fixing unit fixes an image to a sheet of paper;

comparing the fixing temperature to a first threshold value;

temporarily stopping the copy of the document if the fixing temperature is less than the first threshold value;

comparing the fixing temperature to a second threshold value greater than the first threshold value; and

restarting the copying of the document when the fixing temperature becomes greater than the second threshold value.

4. A method according to claim 1, further comprising:
detecting a fixing temperature of the fixing unit, the fixing temperature being a temperature at which the fixing unit fixes an image to a sheet of paper;
comparing the fixing temperature to a first threshold value; and
temporarily stopping the copy of the document if the fixing temperature is less than the first threshold value.

5. A method according to claim 4, further comprising:
comparing the fixing temperature to a second threshold value greater than the first threshold value; and
restarting the copying of the document when the fixing temperature becomes greater than the second threshold value.

6. A method for copying a plural-page document with an image forming apparatus, the image forming apparatus including a scanner for scanning each page of the document and a fixing unit for fixing images of each page of the document to a respective sheet, comprising:
setting a first feed interval, feed interval corresponding to a distance between a trailing edge of a page and a leading edge of a subsequent page;
detecting a fixing temperature of the fixing unit for a current page, the fixing temperature being a temperature at which the fixing unit fixes an image to a sheet of paper;
comparing the fixing temperature for the current page to a first threshold value;

comparing the fixing temperature for the current sheet to a fixing temperature for a prior page if the fixing temperature for the current page is not greater than the first threshold value; and

shortening the feed interval from the first feed interval if the fixing temperature for the current page is greater than the fixing temperature for the prior page.

7. A method according to claim 6, further comprising
comparing the fixing temperature for the current page to a second threshold value, the second threshold value being less than the first threshold value, if the fixing temperature for the current sheet is not greater than the fixing temperature for the prior sheet; and

stopping the copying of the document if the fixing temperature for the current sheet is not greater than the second threshold value.

8. A method according to claim 7, further comprising:
comparing the fixing temperature for the current sheet to a third threshold value greater than the second threshold value if the fixing temperature for the current sheet is not greater than the second threshold value; and

completing the fixing of the current page if the fixing temperature for the current page is greater than the third threshold value.

9. A method according to claim 7, further comprising:
comparing the first feed interval to a maximum feed interval limit;
increasing the feed interval from the first feed interval by a predetermined amount if the first feed interval is less than the maximum feed interval limit.

10. A method according to claim 9, further comprising completing the fixing of the current page at the increased feed interval if the fixing temperature for the current page is greater than or equal to the maximum feed interval threshold value.

11. A method according to claim 6, further comprising completing the fixing of the current page if the fixing temperature for the current page is greater than the first threshold value.

12. An image forming apparatus for copying a plural-page document, comprising:

- a scanner that scans each page of the document

- a control unit configured to determine whether the scanner is scanning any page of the document, set a copy rate for copying the document to a first level if the scanner is scanning any page of the document, the copy rate corresponding to a number of pages copied in a set period of time, and set the copy rate to a second level higher than the first level if the scanner is not scanning any pages of the document; and

- a fixing unit that fixes images of each page of the document to a respective sheet.

13. An image forming apparatus according to claim 12, wherein a first amount of power is supplied to the fixing unit if the scanner is scanning any page of the document, and a second amount of power, higher than the first amount of power, is supplied to the fixing unit if the scanner is not scanning any pages of the document.

14. An image forming apparatus according to claim 13, further comprising:

a sensor that detects a fixing temperature of the fixing unit, the fixing temperature being a temperature at which the fixing unit fixes an image to a sheet of paper,

wherein the control unit is further configured to compare the fixing temperature to a first threshold value, temporarily stop the copy of the document if the fixing temperature is less than the first threshold value, comparing the fixing temperature to a second threshold value greater than the first threshold value, and restart the copying of the document when the fixing temperature becomes greater than the second threshold value.

15. An image forming apparatus according to claim 12, further comprising:

a sensor that detects a fixing temperature of the fixing unit, the fixing temperature being a temperature at which the fixing unit fixes an image to a sheet of paper,

wherein the control unit is further configured to compare the fixing temperature to a first threshold value, and temporarily stop the copy of the document if the fixing temperature is less than the first threshold value.

16. An image forming apparatus according to claim 15, the control unit further configured to compare the fixing temperature to a second threshold value greater than the first threshold value, and restart the copying of the document when the fixing temperature becomes greater than the second threshold value.

17. An image forming apparatus for copying a plural-page document, comprising:

a scanner that scans each page of the document;

a fixing unit that fixes images of each page of the document to a respective sheet;

a sensor that detects a fixing temperature of the fixing unit for a current page, the fixing temperature being a temperature at which the fixing unit fixes an image to a sheet of paper;

a control unit configured to compare the fixing temperature for the current page to a first threshold value, compare the fixing temperature for the current sheet to a fixing temperature for a prior page if the fixing temperature for the current page is not greater than the first threshold value, set a first feed interval, feed interval corresponding to a distance between a trailing edge of a page and a leading edge of a subsequent page, and shorten the feed interval from the first feed interval if the fixing temperature for the current page is greater than the fixing temperature for the prior page.

18. An image forming apparatus according to claim 17, the control unit further configured to compare the fixing temperature for the current page to a second threshold value, the second threshold value being less than the first threshold value, if the fixing temperature for the current sheet is not greater than the fixing temperature for the prior sheet, and stop the copying of the document if the fixing temperature for the current sheet is not greater than the second threshold value.

19. An image forming apparatus according to claim 18, the control unit further configured to compare the fixing temperature for the current sheet to a third threshold value greater than the second threshold value if the fixing temperature for the current sheet is not greater than the second threshold value, and complete the fixing of the current page if the fixing temperature for the current page is greater than the third threshold value.

20. An image forming apparatus according to claim 18, the control unit further configured to compare the first feed interval to a maximum feed interval limit, and increase the feed interval from the first feed interval by a predetermined amount if the first feed interval is less than the maximum feed interval limit.

21. An image forming apparatus according to claim 20, the control unit further configured to complete the fixing of the current page at the increased feed interval if the fixing temperature for the current page is greater than or equal to the maximum feed interval threshold value.

22. An image forming apparatus according to claim 17, the control unit further configured to complete the fixing of the current page if the fixing temperature for the current page is greater than the first threshold value.